

YUVARAJ K

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SUMMARY

Cloud, DevOps & GenAI Engineer | Full Stack MERN & .NET Developer skilled in building **scalable, AI-powered, and cloud-native applications**. Proficient in **LLM integration (OpenAI, Gemini, Hugging Face)**, **CI/CD, Kubernetes, and IaC automation**. Passionate about creating **secure, high-performance, and intelligent systems** that blend **AI innovation with modern cloud and full-stack development**.

EDUCATION

Dhanalakshmi Srinivasan Engineering College (Autonomous) - Perambalur	Oct 2021 – May 2025
B.E. Computer Science Engineering - 9.13 CGPA	

PROFESSIONAL EXPERIENCE

RedSun Innovations Technologies Pvt Ltd, Tuticorin,TN: Cloud DevOps Intern	Dec 2024 – June 2025
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- Guided the **senior DevOps engineer at Everway (UK)** on **automation and Cloud infra optimization**.
- Managed **AWS infrastructure** with **Terraform** (tfstate per env); built 5+ reusable **modules** and managed **IAM access** for 20+ teams across 50+ users using **AWS Identity Center**.
- Created 2+ reusable **CI/CD templates** in **Azure DevOps** for **.NET and NodeJS backend microservices**, cutting setup time for **Developer team by 60%**.
- Automated the **audits** of RDS/Beanstalk for **.NET and MERN Stack applications** across 10+ AWS accounts using shell scripts; enforced custom **WAF rules**.
- Collaborated with a **Principal DevOps Engineer at Pega Systems (Poland)** to set up a **Grafana dashboard** for monitoring **GCP Vertex and Gemini AI services**.

BillionBytes, Perambalur, Tamilnadu: Full-Stack Intern	Sept 2024 – Nov 2024
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- Set up **GitHub Actions** for **MERN Stack** repos and Docker workflows; fixed 10+ **Docker issues** and boosted CI speed by 25%.

TECHNICAL SKILLS

Cloud Computing: AWS, Azure

Database: MySQL, PostgreSQL, MongoDB

Development: JavaScript, NodeJS, ExpressJS, ReactJS, .NET Core, MVC, Web API, EF Core, RESTful API

GenAI ML Tools: OpenAI API, Hugging Face, TensorFlow, PyTorch, FastAPI, MLflow, Prompt Engineering

DevOps Tools: Linux, Git, Docker, Kubernetes, Terraform, Prometheus, Grafana, GitHub Actions, Azure DevOps, Kafka, ArgoCD, ELK Stack, Snyk Scan, Postman, Python, Golang, Bash, PowerShell, YAML

CERTIFICATIONS

AWS Academy Cloud Architecting: AWS Academy Graduate

Cyber Threat Management: Cisco networking Academy

Cloud Practitioner: AWS Cloud Quest (AWS Skill Builder)

Networking Basics: Cisco networking Academy

PROJECTS

1. DevSecOps Project – Random Quote Generator

Developed a microservices app that generates random anime quotes with automated **CI/CD Pipeline, security scanning, GitOps** deployment on **Kubernetes** and **secret management** via HashiCorp Vault. Integrated **monitoring** with Grafana

- Tech stack:**HTML, CSS, JS, Go, Terraform, Docker, Snyk Scan, Grafana, GitHub Actions, HashiCorp Vault, ArgoCD, Slack, AWS (EC2, CloudWatch, VPC, EKS).
- GitHub Repository link - [GitHub](#)

2. Hybrid Model Based Lung Cancer Prediction using Histopathology Images

Deployed **DL Models (EfficientNet, ResNet, DenseNet)** and **LLM Models (BioGPT)** on Minikube using **Docker**, with system monitoring via Prometheus and Grafana for scalable and observable AI-driven cancer prediction.

- **Tech stack:** Python, PyTorch, TensorFlow, EfficientNet, ResNet, DenseNet, BioGPT, Docker, Minikube, Prometheus, Grafana, FlaskAPI, Helm, Jupyter Notebook
- GitHub Repository link - [GitHub](#)

3. Ethereum-Based KYC Verification Framework

Decentralized KYC verification system on a private Ethereum blockchain to automate identity checks, enhance security, and improve bank customer onboarding. Streamlines processes using smart contracts, PoA consensus, and real-time monitoring.

- **Tech stack:** Private Ethereum Blockchain, Solidity (Smart Contracts), Geth, MetaMask, Ether.js, Docker, Minikube, Prometheus, Grafana
- GitHub Repository link - [GitHub](#)

4. SecureEdgeOps – Cloud-Native Threat Detection Mitigation

Built a cloud-native security solution that detects and blocks malicious IPs in real time using honeypots and AWS WAF automation. Integrated end-to-end monitoring, logging and AWS-native automation for over 35% improved network security.

- **Tech stack:** AWS S3, CloudFront, WAF, Lambda, CloudTrail, EventBridge, Systems Manager Parameter Store, Suricata, Wazuh, Terraform, Nmap
- GitHub Repository link - [GitHub](#)

5. MovieWatchList – Full-Stack .NET Application

Full-stack Movie Watchlist app to view, add, edit, and manage movies. Backend uses ASP.NET Core Web API for CRUD Operations with EF Core for database management and migrations and automated tests; frontend uses Next.js for a modern responsive interface.

- **Tech stack:** Next.js, React, ASP.NET Core Web API, EF Core, PostgreSQL, Docker, xUnit
- GitHub Repository link - [GitHub](#)

6. Log Analysis System (Kafka-Based)

Scalable log analysis system with login and register microservices. Processes real-time user activity logs via Kafka and stores them in MongoDB. Deployable on Kubernetes with Helm and automated via Terraform.

- **Tech stack:** Go (Web API Microservices), MongoDB, Kafka, Helm, Terraform, Minikube
- GitHub Repository link - [GitHub](#)

7. Elastic-Cloud-Solution

A resilient and scalable cloud architecture using VPC peering, shared storage, auto scaling, and load balancing. Enables secure cross-VPC communication, dynamic resource management, and seamless access to private instances via Session Manager. Demonstrated both through the management console and IaC automation.

- **Tech stack:** AWS (VPC Peering, EFS, SSM, EC2, ALB), Shell Scripts, Terraform
- GitHub Repository link - [GitHub](#)